

NPDES STORM WATER PERMITTING REGULATIONS

Updated Information from DOE's Office of Environmental Policy and Assistance (EH-41)

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Section 405 of the Water Quality Act of 1987 (WQA) added section 402(p) to the Clean Water Act (CWA), requiring the Environmental Protection Agency (EPA) to develop a phased approach to regulating storm water discharges under the National Pollutant Discharge Elimination System (NPDES) program. On November 16, 1990, EPA published a final regulation [55 *Federal Register (FR)* 47990] establishing permit application requirements for storm water discharges associated with industrial activity and for those from municipal separate storm sewer systems serving a population of 100,000 or more. In the permit application regulations, EPA defined the term "storm water discharge associated with industrial activity" in a comprehensive manner to cover a wide variety of facilities. This definition greatly expanded the number of industrial facilities subject to the NPDES program.

On December 10, 1993, DOE distributed EPA's draft general permit for facilities that submitted group applications as NPDES coverage for their storm water discharges associated with industrial activity (58 *FR* 61146; November 19, 1993). The memo provided background information about the draft general permit and asked for comments on it.

Three major developments related to storm water permitting have taken place since DOE distributed that memo. First, EPA finalized a new general permit, the multi-sector general permit, to replace the group permitting option. Second, EPA issued regulations for phase II storm water dischargers (i.e., those that were not covered by EPA's initial "application rule" issued in November 1990). Finally, EPA published a policy statement describing an interim permitting approach for water quality-based effluent limitations. This update discusses each of these developments.

Multi-sector Storm Water General Permit

At the inception of its storm water permitting program for facilities that discharge storm water associated with industrial activity, EPA provided three permit application options. One of these was to become a participant in a group application.¹ After receipt of a large number of group applications (over 1,200 groups with 60,000 member facilities), EPA abandoned the original group permit concept and replaced it with a multi-sector general permit (MSGP). To implement that option, EPA issued draft (November 19, 1993 [58 *FR* 61146]) and final (September 29, 1995 [60 *FR* 50803 - 51319], corrected at 61 *FR* 5248, February 9, 1996) notices of a MSGP and accompanying fact sheets.

The MSGP provides general permit conditions that apply to all industries and also industry-specific conditions that contain storm water pollution prevention plan requirements, numeric effluent limitation requirements, and monitoring requirements for each of 29 industrial sectors. DOE facilities do not perform activities falling under all 29 industrial sectors. The sectors of most importance to DOE are likely to be hazardous waste treatment, storage, or disposal facilities; landfills and land application sites; scrap and waste

¹ The other two options are the individual permit (requirements of which were established in a November 16, 1990, final rule at 55 *FR* 47990) and the baseline general permit, discussed in 57 *FR* 41175 (9/9/92) and 57 *FR* 44412 (9/25/92).

recycling facilities; steam electric power generating facilities (including coal handling areas); vehicle maintenance or equipment cleaning areas (at certain land transportation facilities); and wastewater treatment works.² The MSGP provides permit coverage for facilities in states or areas without NPDES permit authority³ and at federal facilities located in Alaska, Arizona, the District of Columbia, Delaware, Idaho, Johnson Atoll, Midway and Wake Islands, Puerto Rico, Vermont, and Washington. Of the 40 states that are authorized to issue NPDES permits for municipal and industrial sources, only some have incorporated or plan to incorporate all or portions of EPA's MSGP into their general permit programs.

Some highlights of the MSGP and discussions of some of the common permit conditions follow:

- *Notification.* The deadline for submitting a notice of intent (NOI) to be covered under EPA's MSGP was March 29, 1996 (extended from December 30, 1995). Facilities already covered by EPA's baseline general permit (see 57 FR 41297 [9/9/92] or 57 FR 44438 [9/25/92]) should have submitted a NOI by March 29, 1996, or during the period 90 days prior to the expiration date of the baseline general permit.
- *Compliance with municipal separate storm sewer systems (MS4s).* Addendum D of the permit (60 FR 51269) contains a list of large and medium MS4s. Facilities located in jurisdictions with such systems must comply with local requirements and provide information to the MS4 operator.
- *Endangered Species Act Certification.* All dischargers applying for coverage under the MSGP must certify that their storm water discharges and the construction of best management practices (BMPs) to control storm water runoff are not likely to adversely affect any of the species identified in Addendum H of the permit (see 60 FR 50809 and 60 FR 51278). A four-step process is detailed to fulfill this certification.
- *Pollution prevention plans.* Pollution prevention is the cornerstone of the NPDES permitting program for storm water discharges. All facilities using the MSGP must prepare and implement a storm water pollution prevention plan (see 60 FR 50814 and 60 FR 51115). Many requirements of the storm water pollution prevention plans are common for all industries.⁴ They must describe potential pollution sources and pollution prevention measures, BMPs, and other controls that will

² The other 23 sectors are timber products facilities; paper and allied products manufacturing facilities; chemical and allied products manufacturing facilities; asphalt paving and roofing materials and lubricant manufacturers; glass, clay, cement, concrete, and gypsum product manufacturing facilities; primary metals facilities; metal mining (ore mining and dressing) facilities; coal mines and coal mining-related facilities; oil and gas extraction facilities; mineral mining and processing facilities; automobile salvage yards; vehicle maintenance areas and/or equipment cleaning operations (at water transportation facilities); ship and boat building or repairing yards; vehicle maintenance, equipment cleaning, or deicing areas (at air transportation facilities); food and kindred products facilities; textile mills, apparel, and other fabric product manufacturing facilities; wood and metal furniture and fixture manufacturing facilities; printing and publishing facilities; rubber, miscellaneous plastic products, and miscellaneous manufacturing industries; leather tanning and finishing facilities; facilities that fabricate metal products (e.g., structural metal products, screw machine products, bolts, nuts); facilities that manufacture transportation equipment, industrial, or commercial machinery; and facilities that manufacture electronic and electrical equipment and components, photographic and optical goods.

³ These states and areas are Arizona, the District of Columbia, Florida, Idaho, Johnson Atoll, Louisiana, Maine, Massachusetts, Midway and Wake Islands, New Hampshire, New Mexico, Puerto Rico, Oklahoma, and Texas.

⁴ In general, storm water pollution prevention plans must include information about drainage, an inventory of exposed material, a list of significant spills and leaks during the past three years, certification that discharges have been tested or evaluated for the presence of non-storm water discharges, sampling data on the quality or quantity of storm water discharges, and a summary of potential pollution sources.

be implemented at the facility. There are special requirements for pollution prevention plans prepared for storm water discharges associated with facilities discharging into or through MS4s serving populations equal to or greater than 100,000 people, facilities subject to requirements in Section 313 of the Emergency Planning and Community Right-to-Know Act, and facilities that store salt. There are also specific requirements for the various industry sectors covered by the MSGP.

- *Monitoring and reporting.* The permit contains three general types of monitoring requirements: analytical or chemical monitoring, monitoring for compliance with effluent guidelines, and/or visual examinations of storm water discharges (see 60 *FR* 50820). Specific minimum requirements for each of the 29 industrial sectors are described in Section XI of the permit (60 *FR* 51125) and in the accompanying fact sheet (60 *FR* 50834). EPA also established “benchmark” concentrations for 41 separate parameters, including water quality characteristics and chemicals (60 *FR* 50824). These benchmark values are intended to serve as levels that, if exceeded, indicate a need for additional monitoring. They are not, however, effluent limitations and should not be interpreted or adopted as such.
- *Expiration date.* The MSGP expires on October 1, 2000, (60 *FR* 51108) or when a new general permit is issued, whichever comes first.

Phase II Regulations

EPA has established a common sense approach for storm water permit applications for all phase II storm water dischargers. Phase II facilities generally include all point source dischargers of storm water from commercial, retail, and institutional facilities; construction activities covering less than five acres; and municipal separate storm sewer systems serving populations of less than 100,000. EPA missed a statutory deadline of October 1, 1994, to issue regulations for permits for phase II facilities and came under court order to propose a supplemental phase II rule with more comprehensive requirements by September 1997. On April 7, 1995, EPA issued both a phase II direct final rule (60 *FR* 17949, corrected at 60 *FR* 19464 [4/18/95]) which was to take effect on August 7 and also a proposed rule with provisions identical to the direct final rule (60 *FR* 17958). On August 7, 1995, (60 *FR* 40229) EPA issued a final rule to regulate phase II storm water dischargers that is identical to the proposed rule and also withdrew the direct final rule.

The final rule extends permitting coverage to all dischargers not previously covered under phase I regulations. At this time either the existing phase I individual industrial application requirements in 40 CFR 122.26(c)(1) or the application requirements for municipal separate storm sewer discharges in 40 CFR 122.26(d) will be the requirements for phase II discharges, unless they are modified by the permitting authority.⁵ EPA also provides for and encourages the use of general permits for phase II discharges and requires submission of a notice of intent to be covered by the general permit, consistent with the requirements of 40 CFR 122.28(b)(2) for phase I discharges.

The final rule establishes a sequential or two-tiered application process for all phase II storm water discharges. The first tier is comprised of dischargers “contributing to a water quality impairment or (which) are a significant contributor of pollutants.” To obtain real environmental results early, these dischargers must submit a permit application within 180 days of notification that such an application is required (although the permitting authority has the flexibility to extend this deadline). EPA expects this group to be small because most of these dischargers have already been included under phase I of the storm water program. All other

⁵ “Permitting authority” means EPA or states or Indian tribes with approved NPDES programs.

dischargers (i.e., the second tier) must apply for permits by August 6, 2001, but only if the phase II regulatory program in place at that time requires permits.

Phase II Subcommittee Developments: EPA received comments on the proposed rule requesting clarification of what dischargers would be covered by it and questioning the 180-day deadline for permit applications. In response to these and other issues, EPA stated in the final phase II rule that it would pursue non-permit options for the second tier of dischargers and would develop a supplemental phase II rule under the Federal Advisory Committee Act. The development of this supplemental rule will involve stakeholders in a complete evaluation of the federal storm water permitting program and is expected to be finalized by March 1, 1999. These stakeholders are now part of the Phase II Subcommittee of the Federal Urban Wet Weather Flows Advisory Committee.

Interim Permitting Approach for Water Quality-based Effluent Limitations

On August 26, 1996, EPA issued a notice of its interim permitting approach for water quality-based effluent limitations in storm water permits (61 *FR* 43761). The policy addresses issues related to the type of effluent limitations that are most appropriate to ensure that NPDES storm water permits provide for the attainment of water quality standards. The policy statement applies only to water quality-based effluent limitations; it does not affect technology-based limitations (e.g., those limitations based on effluent guidelines or those developed using the permit writer's best professional judgement). EPA received many requests for additional information regarding the implementation of the policy. Thus, to assist municipalities and permitting authorities in implementing this interim policy, EPA developed and published a set of questions and answers in the *Federal Register* (November 6, 1996, 61 *FR* 57425).

The interim permitting approach uses BMPs in first-round storm water permits and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards. This interim permitting approach is not, however, intended to affect those storm water permits that already include appropriately derived numeric water quality-based effluent limitations.

The policy statement recommends that each storm water permit should require a monitoring program that will determine (1) whether applicable water quality standards are being met and (2) what water quality-related conditions are appropriate for setting limitations in subsequent permits. Such a monitoring program should be conducted in a coordinated and cost-effective manner and may include "ambient monitoring, receiving water assessment, discharge monitoring (as needed), or a combination of monitoring procedures designed to gather necessary information." The amount and types of monitoring necessary will vary depending on the individual circumstances of each storm water discharge.

This interim guidance for assessing water quality and associated limitations only applies to permittees operating under the authority of EPA, although EPA has encouraged states and tribes with permitting authority to incorporate it into their programs. Thus, DOE facilities operating under the permitting authority of a state or tribe should inquire as to whether that governmental organization has developed a similar water quality permitting policy.

Additional Information

Additional information on these topics is available through the Internet at the following addresses:

<http://tis-nt.eh.doe.gov/oepa/> - This is the EH-41 Web site. The office develops DOE-wide environmental protection policies and strategies for protecting the public and the environment and for achieving compliance

with internal and external environmental requirements. The Web site leads to information about the office and the latest federal regulatory initiatives and allows viewing and downloading of a large number of guidance documents and *FR* notices in portable document format (PDF). A search function allows the reader to locate documents related to stormwater permitting or other topics on the Web site.

<http://homer.hsr.ornl.gov/oepa/weekly/weekly.cfm> - This address accesses the “*Weekly Federal Register Digests*” that are provided by EH-41. These digests contain a selection of items related to environmental protection, safety, and health that may be of interest or importance to DOE. In some cases proposed and final rules are provided by EH-41 as PDF files which contain the complete rules as they were published in the *FR*. A search function allows the reader to find specific *FR* notices related to stormwater permitting.

<http://www.epa.gov/owmitnet/pipes/pipes.htm> - The Point Source Information Provision and Exchange System (PIPES) is an electronic Bulletin Board System sponsored by EPA’s Office of Wastewater Management. It is designed to facilitate the exchange of information among EPA, states, municipalities, industry, and the public and to further the mission and goals of EPA and its point-source permitting programs. As of April 1998, EPA was in the process of shutting PIPES down. Information housed on PIPES was to be transferred to EPA’s Office of Wastewater Management Web site (<http://www.epa.gov/OWM/>).

<http://www.epa.gov/docs/fedrgstr/EPA-WATER> - This address provides *Federal Register* information specific to water-related issues with material posted on a daily basis. Coverage is from October 1, 1994, through the present.

For more information on any of these issues, contact Lois Thompson, EH-412, (202) 586-9581; mailing address: Office of Environmental Policy and Assistance, EH-412, US Department of Energy, 1000 Independence Avenue SW, Washington DC 20585-0119; email address: lois.thompson@eh.doe.gov; fax number (202) 586-3915.